### United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,899	10/11/2005	Horst Neuerburg	279340US6PCT	6917
22020	7590 - 04/25/2007 AK MCCLELLAND N	EXAMINER		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			KOVACS, ARPAD F	
			ART UNIT	PAPER NUMBER
		3671		
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	NOTIFICATION DATE .	DELIVERY MODE	
3 MO	NTHS	04/25/2007	ELECTRONIC	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 04/25/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com oblonpat@oblon.com jgardner@oblon.com

		Application No.	Applicant(s)			
Office Action Summary		10/552,899	NEUERBURG ET AL.			
		Examiner	Art Unit			
		Árpád Fábián Kovács	3671			
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
2a) <u>□</u> 3) <u>□</u>	Responsive to communication(s) filed on <u>11 Oc</u> This action is <b>FINAL</b> . 2b) This Since this application is in condition for allowar closed in accordance with the practice under E	action is non-final. ace except for formal matters, pro				
	on of Claims	•				
5)	Claim(s) 12-22 is/are pending in the application 4a) Of the above claim(s) is/are withdraw Claim(s) is/are allowed. Claim(s) 12-22 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or on Papers The specification is objected to by the Examine 17he drawing(s) filed on is/are: a) access applicant may not request that any objection to the or is/are: a)	vn from consideration.  election requirement.  epted or b) □ objected to by the Edrawing(s) be held in abeyance. See	37 CFR 1.85(a).			
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority u	nder 35 U.S.C. § 119					
<ul> <li>Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a)  All b)  Some * c) None of:</li> <li>1.  Certified copies of the priority documents have been received.</li> <li>2.  Certified copies of the priority documents have been received in Application No</li> <li>3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
2) Notice 3) Inform	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO/SB/08) No(s)/Mail Date 7/31/2006; 10/11/2005.	4)  Interview Summary Paper No(s)/Mail Da 5)  Notice of Informal P 6)  Other:	ite			

Application/Control Number: 10/552,899

Art Unit: 3671

#### DETAILED ACTION

#### Information Disclosure Statement

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

### Specification

- 2. As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:
  - (a) TITLE OF THE INVENTION.
  - (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
  - (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
  - (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
  - (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
  - (f) BACKGROUND OF THE INVENTION.
    - (1) Field of the Invention.
    - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
  - (g) BRIEF SUMMARY OF THE INVENTION.
  - (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
  - (i) DETAILED DESCRIPTION OF THE INVENTION.
  - (j) CLAIM OR CLAIMS (commencing on a separate sheet).
  - (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

Application/Control Number: 10/552,899

Art Unit: 3671

(1) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### Drawings

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the

in re cl. 12: "a sensor configured to measure a roll angle of the mower" on pg 8, ln 36-39, pg 9, ln 1-4:

In the exemplary embodiment depicted schematically in FIG. 5, the control device (20) for this purpose comprises a sensor (21) allowing the angle of inclination of the mower (1) about the longitudinal axis (7) of the motor vehicle (2), that is to say the roll angle, to be measured with respect to the horizontal. By way of nonlimiting example, such a sensor (21) may be produced using an inclinometer.

on pg 15, ln 5·10:

Likewise, the control device (20) could very well not contain the sensor (21) intended to measure the roll angle of the mower (1; 101). Indeed, according to another exemplary embodiment, the information regarding the roll angle of the mower (1; 101) could originate from a sensor already present on the motor vehicle (2).

from the above disclosure & fig 5, the sensor defined and capable of carrying out the functional recitation is not shown;

in re cl. 20: "the sensor additionally allows yaw angle of the motor vehicle to be measured"

on pg. 12, ln 7·16:

Art Unit: 3671

In a way which is also preferred, the sensor (21) additionally allows the yaw angle of the motor vehicle (2) to be measured. The control device (20) is thus capable of determining the radius of curvature of the path taken by the motor vehicle (2) and of correcting the position of the lateral working units (5, 6) accordingly. As a result, the amount of cutting overlap (19) is kept optimum even in a curved path followed on horizontal land. By way of nonlimiting example, such a sensor (21) is produced using an inertia unit.

from the above disclosure & figures, the sensor defined and capable of carrying out the functional recitation is not shown;

in re cl. 21: "a detection means for informing the driving unit when the at least one working unit has reached a central position"

on pg. 9, ln 19-24:

As a preference, the control device (20) further comprises a detection means (24) for informing the driving unit (22) when the lateral working units (5, 6) have reached a central position, that is to say when the lateral working units (5, 6) are positioned symmetrically one on each side of the longitudinal axis (7).

on pg. 9, ln 33·38:

By way of example, such a detection means (24) may be produced by a contactor fixed to one of the parts (14a, 14b) of the chassis (14) and feeling the other of the parts (14a, 14b). This contactor then transmits a signal to the driving unit (22) when the lateral working units (5, 6) have reached the central position.

from the above disclosure & figures, the sensor defined and capable of carrying out the functional recitation is not shown;

in re cl. 22: "the detection means comprises a position sensor configured to measure the transverse position of the at least one working unit with respect to the motor"

on pg. 10, ln 11-18:

Advantageously, the driving unit (22) determines, for each value of the roll angle, the optimum amount of transverse movement to be imparted to the

Art Unit: 3671

lateral working units (5, 6). To do that, the detection means (24) is preferably produced as a position sensor constantly informing the driving unit (22) of the relative position of the front part (14a) with respect to the rear part (14b) of the chassis (14).

on pg. 14, ln 23-28:

In this second exemplary embodiment, the detection means (24) this time detects the angular position of the drawbar (28) with respect to the chassis (25) about the articulation (29). This angular position of the drawbar (28) allows the transverse position of the working unit (106) to be determined.

from the above disclosure & figures, the sensor defined and capable of carrying out the functional recitation is not shown;

in re cl. 20, 21, 22: lastly, the combination of sensors as claimed and outlined above and in view of the disclosure and figures are not shown, see pg. 10, ln 30·31:

It is also possible to use a combination of these two ways of determining the optimum movement.

therefore the claimed feature(s) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be

Art Unit: 3671

necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

## Claim Rejections - 35 USC § 112

- 5. The following is a quotation of the first paragraph of 35 U.S.C. 112:
  - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 6. Claims 12-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.
  - in re cl. 12: "a sensor configured to measure a roll angle of the mower" on pg 8, ln 36-39, pg 9, ln 1-4:

In the exemplary embodiment depicted schematically in FIG. 5, the control device (20) for this purpose comprises a sensor (21) allowing the angle of inclination of the mower (1) about the longitudinal axis (7) of the motor vehicle (2), that is to say the roll angle, to be measured with respect to the horizontal. By way of nonlimiting example, such a sensor (21) may be produced using an inclinometer.

on pg 15, ln 5·10:

Art Unit: 3671

Likewise, the control device (20) could very well not contain the sensor (21) intended to measure the roll angle of the mower (1; 101). Indeed, according to another exemplary embodiment, the information regarding the roll angle of the mower (1; 101) could originate from a sensor already present on the motor vehicle (2).

and in view of the above disclosure & fig 5, the sensor defined and capable of carrying out the functional recitation is not enabling;

in re cl. 20: "the sensor additionally allows yaw angle of the motor vehicle to be measured"

on pg. 12, ln 7-16:

In a way which is also preferred, the sensor (21) additionally allows the yaw angle of the motor vehicle (2) to be measured. The control device (20) is thus capable of determining the radius of curvature of the path taken by the motor vehicle (2) and of correcting the position of the lateral working units (5, 6) accordingly. As a result, the amount of cutting overlap (19) is kept optimum even in a curved path followed on horizontal land. By way of nonlimiting example, such a sensor (21) is produced using an inertia unit.

and in view of the above disclosure & figures, the sensor defined and capable of carrying out the functional recitation is not enabling;

in re cl. 21: "a detection means for informing the driving unit when the at least one working unit has reached a central position"

on pg. 9, ln 19-24:

As a preference, the control device (20) further comprises a detection means (24) for informing the driving unit (22) when the lateral working units (5, 6) have reached a central position, that is to say when the lateral working units (5, 6) are positioned symmetrically one on each side of the longitudinal axis (7).

on pg. 9, ln 33-38:

By way of example, such a detection means (24) may be produced by a contactor fixed to one of the parts (14a, 14b) of the chassis (14) and feeling the other of the parts (14a, 14b). This contactor then transmits a signal to the driving unit (22) when the lateral working units (5, 6) have reached the central position.

Art Unit: 3671

and in view of the above disclosure & figures, the sensor defined and capable of carrying out the functional recitation is not enabling;

in re cl. 22: "the detection means comprises a position sensor configured to measure the transverse position of the at least one working unit with respect to the motor"

on pg. 10, ln 11-18:

Advantageously, the driving unit (22) determines, for each value of the roll angle, the optimum amount of transverse movement to be imparted to the lateral working units (5, 6). To do that, the detection means (24) is preferably produced as a position sensor constantly informing the driving unit (22) of the relative position of the front part (14a) with respect to the rear part (14b) of the chassis (14).

on pg. 14, ln 23-28:

In this second exemplary embodiment, the detection means (24) this time detects the angular position of the drawbar (28) with respect to the chassis (25) about the articulation (29). This angular position of the drawbar (28) allows the transverse position of the working unit (106) to be determined.

and in view of the above disclosure & figures, the sensor defined and capable of carrying out the functional recitation is not enabling;

in re cl. 20, 21, 22: lastly, the combination of sensors as claimed and outlined above and in view of the disclosure and figures are not enabling, see pg. 10, ln 30-31:

It is also possible to use a combination of these two ways of determining the optimum movement.

7. Claims 12-22 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for an operating member (ram refs 18, 118), does not reasonably provide enablement for the control device (ref 20), esp. the sensor(s)

Art Unit: 3671

(ref 21) & detecting means (ref 24). The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. Because the applicant did not state that any of the sensors and the detection means are well known to one skilled in the art, and the examiner is unclear in view of the disclosure and the drawings (see quotations drawn from applicant's disclosure above) how each and combination of sensors and detection means can be made and used by one having ordinary skill in the art, therefore, the sensors and detecting means as claimed and disclosed are not enabling. There would be undue experimentations in making and using the device which are not limited to:

- (1) the level of one ordinary skill in the art, the control system that is capable of acting or having sensors and detection means as claimed & outlined above is unknown in the examiner's art;
- (2) the level of predictability in the art, the sensors and detection means cannot be predicted (as claimed and disclosed) as how they could be made and used, esp. as applicant disclosed on page 15, ln 5·10, the sensors may not even be associated with the control system of fig 5; and applicant's disclosure is silent how the other sensor would interoperate with the ram (18, 118) and/or determine or provide signals for accomplishing the features claimed and/or disclosed;
- (3) the existence of working examples, fig 5 showing in block diagrams 21
  & 24 as the detection means and the sensor (note: subsequent sensors of claims 20-

Application/Control Number: 10/552,899

Art Unit: 3671

22 are not identified in the drawings) is not sufficient example as to illustrate how the device can be made and used; furthermore, the sensor on page 15, ln 5·10, is not even shown anywhere and/or disclosed at any length to determine the scope and enablement of the claimed and disclosed invention;

- (4) the amount of direction provided by the inventor, direction provided in fig 5 and/or the disclosure, see relevant sections quoted above, is not adequate;
- (5) the quantity of experimentation needed to make or use the invention based on the content of the disclosure, as an example in re cl. 12, while the applicant recites the roll angle can use an inclinometer (see on pg 8, ln 36·39, pg 9, ln 1·4), or other undefined "existing" sensor on the machine (see on pg 15, ln 5·10), the number of experimentation to make and use such devices is undue.
- 8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 9. Claims12-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- In re cl. 1: "a sensor configured to measure ... and a driving unit processing information from the sensor and controlling a distributor" is unclear.

# Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Application/Control Number: 10/552,899

Art Unit: 3671

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 11. Claims 12, 17-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Van der Lely et al (part of record, '042).

As best could be understood from the claims, Van der Lely discloses:

- cl. 12: frontal & lateral working units (fig 1, ref 2, 5); connecting device (fig 1, hitch), operating member / control device (hydraulic cylinder 42; controlling operate the working device at different transverse positions, see fig 3)
- cl. 17: chassis (fig 3), wheels (6), hitching head (fig 3) to which a drawbar (4) is connected & to the vehicle (fig 3), the hitching head having axis directed upwards (fig 3);
- cl. 18: the operating member is connected to the chassis & the drawbar (fig 3); cl. 19: the working unit at the rear of the vehicle (fig 3).
- 12. Claims 12-22 are rejected under 35 U.S.C. 102(b) as being anticipated by DE29816837U1 (cited by applicant).

Front & lateral working units (fig 1), connecting, operating & control devices (fig 1, 4, 5); trapezium (fig 4, 5), chassis & link rods & wheels (fig 2a-b; 4, 5).

## Claim Rejections - 35 USC § 103

- 13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be

Art Unit: 3671

patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

14. Claims 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van der Lely et al (part of record, '042), in view of Haberkorn (part of record, '399).

Van der Lely discloses the claimed device except for the connecting device defined by claims (embodiment of fig 1·4).

Haberkorn discloses that it is known in the art to provide a quadrilateral, trapezium connecting device (fig 2).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the connecting device of Van der Lely with the teachings of Haberkorn, in order to more easily pivot the mower around the vertical axis or adjusting the mower in the direction of advance, and/or pick and choose between the connecting device embodiment represented by Van der Lely or the quadrilateral trapezium defined by applicant 1st embodiment (fig 1-4); in either case the device would operate as intended.

#### Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See form 892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Árpád Fábián Kovács whose telephone number is 571 272 6990. The examiner can normally be reached on Mo-Th.

Art Unit: 3671

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will can be reached on 571 272 6998. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Árpád Fábián Kovács Primary Examiner Art Unit 3671

ÁFK